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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/774,538	01/31/2001	Ian E. Abrahams	2-591.5	3241

4955 7590 04/18/2006

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EXAMINER	
CHOI, PETER H	

ART UNIT	PAPER NUMBER
3623	

DATE MAILED: 04/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/774,538	ABRAHAMS ET AL.	
	Examiner	Art Unit	
	Peter Choi	3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 2/3/06.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-20 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-20 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 3, 2006 has been entered.

Response to Arguments

2. Applicant's arguments filed December 22, 2005 have been fully considered but they are not persuasive.

Applicant argues that Mulholland does not teach or suggest what could fairly be likened to a body of risk information, including:

- quantitative risk information in any arrangement
- risk information for a particular project

The Examiner respectfully disagrees. Column 11, lines 2-10 of Mulholland disclose, "For the purposes of the modeling process, the variance of the performance

time distribution of a project was used to measure schedule risk". The performance time is quantitative risk information gathered for a particular project, and Table 4 presents the arrangement of the quantitative risk information. Columns 4-9 of Table 4 each contain quantitative risk information by measuring estimated performance time (in months).

Applicant argues that Mulholland does not teach a risk processor for updating the former body of risk information based on the risk information for a particular project.

The Examiner respectfully disagrees. Mulholland discloses the use of commercially available application programs called HyperCard and Excel. The use of said computer software programs inherently require the use of a computer processor for execution; thus, the use of HyperCard and Excel implicitly provides the use of the processor of the hosting computer to meet this limitation. Page 12, Column 2, lines 57-58 disclose that: "The EXCEL spreadsheet model also provides the means for sensitivity analyses for different outcomes", the sensitivity analyses being performed by varying one certain element at a time, thereby updating the body of risk information for a particular project.

Applicant argues that Mulholland teaches a knowledge base for risk identification, not risk measurement.

The Examiner respectfully disagrees. From page 10, Column 2, lines 4-12: "Classic risk analysis is undertaken in the following three iterative phases: (1) Risk identification; (2) risk measurement; and (3) risk management (Diekmann et al. 1988). The subject of this paper, risk assessment, is involved with the first two phases of risk analysis." Thus, Mulholland is directed towards risk identification ***and*** risk measurement.

Applicant argues that there is no teaching or suggestion in Mulholland of a "knowledge base including quantitative risk information updated by risk processor functionality based on corresponding quantitative risk information in a particular project, irrespective of any particular organization of the risk information in the knowledge base."

The Examiner respectfully disagrees. Page 12, Column 2, lines 57-61 disclose that: "The EXCEL spreadsheet model also provides the means for sensitivity analyses for different outcomes. Sensitivity analyses can be performed by varying one uncertain element at a time and examining the effect of the change in that element on the total project performance time." Therefore, one uncertain element (a value for the risk in a particular project on which quantitative risk values are based on) is varied at a time using the EXCEL spreadsheet model (which runs on a computer processor), which in turn effects the total project performance time, which has been disclosed to be performance time (a quantitative value associated with a risk), meeting the limitation of the claim.

Applicant argues that the three recursive steps taught by Mulholland do not include any kind of updating of historical information based on current information.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., updating historical information based on current information) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). As currently claimed, one of the subjective or quantitative values is updated based on a corresponding field in the profile risk record in the data store of profiles. There is no limitation that any information is specifically updated based solely on current information, nor that the subjective or quantitative values updated are historical values.

Applicant argues that Mulholland cannot be asserted to "have the same plurality of fields" or be organized in the same way, or even include the same information

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., structural organization of data fields) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26

USPQ2d 1057 (Fed. Cir. 1993). As currently claimed, a knowledge base maintains a generic risk record including a plurality of fields having at least some subjective or quantitative values. There is no further limitation regarding the content of said data fields or the organization of said data fields (other than it's existence within a generic risk record). As presented above, Mulholland provides a plurality of data fields within an EXCEL spreadsheet having a plurality of subjective or quantitative values (estimated project performance time) pertaining to a project.

If the values contained within the fields are being claimed, the values are considered to be nonfunctional descriptive material that is of no import to the scope of the claim insofar as the claim is drawn to a system made up of elements capable of performing the recited functions. Patentable weight is not given to the field value for this reason.

Applicant argues that the combination of Mulholland and White fail to teach the claimed invention in that it fails to teach or suggest the updating of risk information in a knowledge base, or the maintaining of information in the knowledge base in the same arrangement as for a particular project.

As explained above, Mulholland discloses the use of commercially available application programs called HyperCard and Excel. Page 12, Column 2, lines 57-58 disclose that: "The EXCEL spreadsheet model also provides the means for sensitivity

analyses for different outcomes", the sensitivity analyses being performed by varying one certain element at a time, thereby updating the body of risk information in a knowledge base for a particular project.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., maintaining information in the knowledge base in the same arrangement as for a particular project) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). As currently claimed, the claimed invention provides for "a data store of profiles, for maintaining a profile risk record associated with a particular profile and including the same ***plurality of fields***".

If the values contained within the fields are being claimed, the values are considered to be nonfunctional descriptive material that is of no import to the scope of the claim insofar as the claim is drawn to a system made up of elements capable of performing the recited functions. Patentable weight is not given to the field value for this reason.

Regardless, Mulholland provides a plurality of data fields within an EXCEL spreadsheet having a plurality of subjective or quantitative values (estimated project

performance time) pertaining to a project. The HyperCard database acts as a generic template for risk records, which are customized for each project. Furthermore, the concept of inheritance is old and well known in the field of computer science. Specifically, in object oriented programming, inheritance is where new (derived) classes are formed based on (base) classes that have already been defined; the derived classes inherit attributes and behavior of the base classes. The base classes act as templates, and derived classes are specific instances of said base classes, similar to the claimed generic risk profile (generic template) and profile risk records (specific instance of the generic template).

Claim Rejections - 35 USC § 101

Under the statutory requirement of 35 U.S.C. § 101, a claimed invention must produce a useful, concrete, and tangible result. For a claim to be useful, it must yield a result that is specific, substantial, and credible (MPEP § 2107). A concrete result is one that is substantially repeatable, i.e., it produces substantially the same result over and over again (*In re Swartz, 232 F.3d 862, 864, 56 USPQ2d 1703, 1704 (Fed. Cir. 2000)*). In order to be tangible, a claimed invention must set forth a practical application that generates a real-world result, i.e., the claim must be more than a mere abstraction (*Benson, 409 U.S. at 71-72, 175 USPQ at 676-77*). (Please refer to the "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" for further explanation of the statutory requirement of 35 U.S.C. § 101.)

Regarding a useful result, the claimed invention must yield a result that is specific, substantial, and credible. The recitation of maintaining/updating generic risk records is not deemed to be specific, substantial, and credible because the claimed invention does not have a specific or substantial result, nor is there a positive citation of use for the result. Risk records are maintained and updated, but this result is intangible and lacks usefulness.

Regarding a tangible result, the claimed invention must set forth a practical application that generates a real-world result, i.e., the claim must be more than a mere abstraction. For example, maintaining and updating generic risk records *per se* is abstract because there is no real-world application of the risk records. The claimed invention merely collects a plurality of data, but does not positively recite an application or analysis of said collected data.

In another example, the claimed invention directed towards the steps of collecting and updating risk records would be deemed non-statutory under 35 U.S.C. § 101 for at least failing to produce a tangible result. These steps could be limited to the mind of a human user. Until such steps are used to manifest some effect in the real-world, they constitute a mere abstract idea.

If, however, the risk records were somehow used in a real-world application such as managing projects (based on the corresponding identified risks), or generating new generic risk templates (used to provide risk analysis of future projects), then the claimed invention would yield a real-world, i.e., tangible, result.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 4-8 and 14-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claims 4 and 14 recites the limitation "the risk management analysis" in lines 4-5. There is insufficient antecedent basis for this limitation in the claim. For examination purposes, the Examiner has interpreted the aforementioned limitation to read “a risk management analysis”.

Claim Rejections - 35 USC § 103

6. Claims 1-2, and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mulholland (article, "Risk Assessment in Construction Schedules" by B. Mulholland and J. Christian).

As per claim 1, Mulholland teaches a system for providing an analysis of use in managing risk, the system comprising:

(a) a knowledge base **(HyperCard knowledge base)**, for maintaining a generic risk record **{EXCEL spreadsheets used for modeling schedule risk}** including a plurality of fields **{columns 1-9 of Table 4, columns 1-10 of Table 5}**, at least some of which have subjective **(Engineering risks, Importance, Confidence, Relative Importance, columns 1-3 and 9 of Table 4)** or quantitative values **{Activity Time Estimates, columns 4-9 of Table 4; Probability of project duration, columns 2-10 of Table 5}** with the subjective values synchronized to numerical values **{subjective labels/values Engineering risks, Importance, Confidence, and Relative Importance are associated with a range of numerical values, as seen in Table 4 }** [Figure 5, Tables 4-5];

(b) a data store of profiles, for maintaining a profile risk record associated with a particular profile **{a particular construction project; EXCEL spreadsheets used for modeling schedule risk for individual projects},** the profile risk record for use in providing a risk assessment in the associated profile **{Conceptual project schedule is subjected to Project Team's Job Knowledge Experience, which is then used in**

risk identification and risk measurement; estimate of project duration} [Figure 2, Tables 4-5, page 11, Column 1, lines 8-12]; and

(c) a risk processor **{the computer hosting the HyperCard system and EXCEL spreadsheets which are used in performing the risk assessment}**, for updating at least one of the subjective or quantitative values of the generic risk record based on a corresponding field value in the profile risk record in the data store of profiles **(an estimate of the overall project duration must be produced based on uncertain data; modeling the effects on uncertainty on the project schedule by use of three recursive steps, (1) Identify schedule risks, (2) evaluate their effects and the probability of occurrence, and (3) within the proposed project schedule framework, model the risk and their effects to obtain the project's schedule risk profile; The HyperCard system can provide the basis for risk identification by presenting most known schedule risks. The database provided by the HyperCard system should act as a stimulus for follow-up brainstorming sessions with the key members of the project team. The output from the review of the HyperCard database and the brainstorming process should produce a comprehensive list of potential schedule risks, which then can be rewritten and reordered into the relevant risks for each dimension of schedule uncertainty)** [page 11, Column 1, lines 10-17, 32-40];

whereby at least some of the subjective or quantitative values of the generic risk record are refined over time based on values of the corresponding fields of the profile risk record **(recursive refinement of probabilistic schedules based on identified**

and measured risks; the output from the review of the HyperCard database and the brainstorming process should produce a comprehensive list of potential schedule risks, which then can be rewritten and reordered into the relevant risks for each dimension of schedule uncertainty; the EXCEL spreadsheet model provides means for performing sensitivity analyses by varying one uncertain element at a time and examining the effect of the change in that element on the total project performance time; transfer project experience and institutional knowledge to new projects) [Figure 2, page 11, column 1, lines 36-40, page 12, column 2, last paragraph].

Mulholland does not explicitly disclose that the profile risk record includes the same plurality of fields as the generic risk record. However, the HyperCard database acts as a generic template for risk records, which are customized for each project. Combined with a brainstorming session with key members of the project team, a comprehensive list of potential (relevant) schedule risks, which are rewritten and reordered into a database of engineering design risks for each dimension of schedule uncertainty. Furthermore, the concept of inheritance is old and well known in the field of computer science. Specifically, in object oriented programming, inheritance is where new (derived) classes are formed based on (base) classes that have already been defined; the derived classes inherit attributes and behavior of the base classes. The base classes act as templates, and derived classes are specific instances of said base classes, similar to the claimed generic risk profile (generic template) and profile risk

records (specific instance of the generic template). Therefore, Mulholland's use of the HyperCard databases as a foundation prior to customization is considered by the Examiner to be an instance of inheritance, where the specific instance (profile risk record) is created of the generic template (generic template), sharing the same fields, but differing in value; therefore, the limitation of the claim is met.

As per claim 2, Mulholland teaches the system of claim 1, wherein some of the subjective or quantitative values are values of measuring fields input by the user **(sensitivity analyses is performed by varying one uncertain element at a time and examining the effect of the change in that element on the total project performance time)**, and others are values of calculated fields calculated by the system **(variance of estimated activity time, column 8 of Table 4)**, and the system allows different modes of analysis **(reexamination of the assumptions and identification of factors that drive schedule performances; recognition of hidden assumptions)** in which the fields that are the measuring fields differ [Table 4, page 12, column 2, last paragraph, page 13, column 2, lines 3-8].

As per claim 4, Mulholland teaches the system of claim 1, wherein the system can be used in different modes of use **(identifying schedule risks, evaluating the effects and probability of occurrence of schedule risks, modeling the risks and their effects within the proposed project schedule framework to obtain the project's schedule risk profile)**, and further wherein only some of the fields of the

generic risk record or the profile risk record are required to be used in the risk management analysis, and which of the fields are required depends on the mode of use **(the uncertainty in each phase of the project life-cycle is driven by its own unique set of variables and is differentiated from the other phases by work content)** [page 9, column 1, lines 47-51, page 11, column 1, lines 12-17].

As per claim 9, Mulholland teaches the system of claim 1, further comprising a scripting facility for enabling a user to create a script directing how a risk management process is to be performed, the script indicating steps that can be used in performing risk analysis in any profile **(the Hypertext system component of the HyperCard information system is composed of schedule risk information linked together using hypertext tools; the system's links provide the means to access the documents within the database. The links, which guide the user through the database, can be divided into two types: organizational and navigational. Organizational links connect the structure of the system. These links appear as buttons along the bottom of every screen. Clicking the buttons executes the links and thus allows the user to move between the various documents in the database. In the database the basic elements of information are contained in objects. Once an object has been defined, it is possible to define navigational links that lead to other documents in the database; following an interactive session with the HyperCard information system, the effects of the risks identified**

in the four dimensions of schedule uncertainty can be evaluated) [page 12, column 2, lines 9-10, 29-45].

As per claim 10, Mulholland teaches the system of claim 1, further wherein the risk processor also uses the generic risk record to provide initial values for the profile risk record, whereby the profile risk record has initial values based on experience gained over time **(the HyperCard risk factor identification module contains information acquired from many experts and previous construction projects; document and transfer project experience and institutional knowledge to new projects {the risk values experienced over time are provided as "initial" values to new projects})** [page 12, column 1, lines 37-39, page 14, column 2, lines 10-13].

7. Claims 3, 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mulholland as applied to claim 1 above, and further in view of Summerell et al (U.S Patent #5,937,387).

As per claim 3, Mulholland does not explicitly teach the system of claim 2, wherein the modes of analysis include:

(a) a residual assessment mode, in which a user selects inherent values of likelihood and consequence for a risk, and a value, for each control for the risk, for effectiveness in either preventing the risk or reducing the consequence of the risk, and the system then calculates residual levels of likelihood, consequence and risk rating for

the risk;

(b) an inherent assessment mode, in which a user selects residual values of likelihood and consequence for a risk, and a value, for each control for the risk, for effectiveness in either preventing the risk or in reducing the consequence of the risk, and the system then calculates the inherent levels of likelihood, consequence and risk rating for the risk; and

(c) a controls self-assessment mode, in which a user selects inherent values of likelihood and consequence for a risk, as well as residual values of likelihood and consequence for the risk, and the system then calculates the effectiveness of predetermined controls needed to either prevent the risk or to reduce the consequence of the risk.

However, Summerell et al. teaches a health profile questionnaire used to assess a user's relative wellness for a set of relative risk factors. Each factor is associated with a series of relative probabilities. The relative risk factors can relate to voluntary life style choices, habit, environment, disease transitions or genetic predispositions such as accident prone behaviors, age of death of parents, air pollution, alcohol, allergies, angioplasty, aspirin, asthma, blood pressure, body mass index, breakfast, coronary artery bypass graph, calcium, cigarette smoking, diabetes, dietary cholesterol, dietary fiber, driving while intoxicated, eating between meals, education level of spouse, education status, employment status, estrogen, forced expiratory volume in one second, firearms, first myocardial infarction, folate, functional status, garlic powder, genetic makeup, genetic risks, green tea, HDL cholesterol, heart rate, helmet use,

immunizations, income, iron, job strain, liver disease, low back pain, lycopene, major life events, marital status, meat eating, coronary artery disease, medication compliance, medication use, non-steroidal anti-inflammatory drugs, occupation, parent's divorce, passive smoking exposure, pets, physical activities, renal disease, safety belt use, self reported health status, sleep, social contacts, stamina, strength, stress, troke, suicide attempt, total cholesterol, traffic tickets, transfusions, vitamin A, B vitamins, vitamin C, vitamin D, vitamin E, white blood cell count, weight changes, zinc, and weight cycling, among others [Column 9, lines 26-61].

Summerell et al. teaches relative risk **(value of likelihood and consequence for a risk)**, the ratio of the occurrence of death in people with an attribute to the incidence in people without an attribute. The higher the deviation of the relative risk from the baseline, which is assumed to be 1, the more the attribute is a cause/marker of mortality. Conversely, the lower the deviation, the less the attribute is a cause/market of mortality. Attributes with relative risks above the baseline are considered causes/markers of mortality **(an inherent value of likelihood)**. Attributes with relative risks less than 1 are treated as beneficial [Column 9, line 62 – Column 10, line 16].

The Summerell et al. system presents the user with a list of planner options that have been chosen by the system based upon input by the user. Using the list, the user can select one or more of the options **(the user selects from a plurality of options, each having values of likelihood and consequence)** to form a wellness plan. The

user can then determine the physiological effect of implementing the chosen wellness plan. This process can be repeated such that the user can evaluate the effects of various wellness plans, and then decide upon their preferred plan. This allows a user to evaluate the benefits of varying combinations of planner options [Column 17, lines 15-24]. Figures 18-29 of Summerell et al. provide examples of the wellness planner. Figures 18 and 19 show examples of physiological age planning windows, without selected plan items. The user can select from a list of recommendations to reduce physiological age, which is displayed as "Maximum Age Reduction (years)" **(indicating the calculated effectiveness of the control in preventing or reducing the consequence of risk)**. Figures 20 and 21 show examples of physiological age planning windows, with selected plan items. The physiological age is calculated after implementing recommendations **(residual likelihood)** is displayed.

Summerell et al. is directed towards helping users consider and quantify their relative wellness (based on a series of wellness factors) and further evaluate the potential effect on the user's physiological age and wellness implementing a plurality of options/recommendations. Similarly, Mulholland is directed towards considering and quantifying risk, and enabling a sensitivity analysis by varying one uncertain element at a time and examining the effect of the change in that element on the total risk value. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Mulholland to include the steps of user-interactive risk assessment and evaluation, as disclosed by Summerell et al., because the resulting

combination would enable an interactive sensitivity analysis means for evaluating the consequences of voluntary actions on overall risk, a tool that provides the user with a means of measuring progress towards reducing risk.

As per claim 5, Mulholland teaches the system of claim 4, wherein both the generic risk record and the profile risk record each comprise:

(a) a risk component, for indicating a risk **(identify schedule risks; produce a comprehensive list of potential schedule risks)**, for indicating an inherent risk rating, and also for indicating a residual risk rating **(Importance, column 3 of Table 3)** [page 11, column 1, lines 14-15, 36-39];

(b) a cause component, for indicating the cause of the risk **(Risk Source, column 2 of Table 3)** [Table 3]; and

(c) a consequence component, for indicating a particular consequence of the risk **(evaluate the effects and probability of occurrence of schedule risks)** and an inherent and a residual cost of the particular consequence **(variance of the performance time distribution of a project)** [page 11, column 1, lines 14-15, Tables 4-5, column 2, lines 2-10];

Mulholland does not explicitly teach (d) a control component, for indicating a control, for indicating whether the control is corrective or preventative, and for indicating the effectiveness of the control.

The Summerell et al. system presents the user with a list of planner options **(control component for indicating a control)** that have been chosen by the system based upon input by the user. Using the list, the user can select one or more of the options to form a wellness plan. The user can then determine the physiological effect of implementing the chosen wellness plan **(indicating the effectiveness of the control)**. This process can be repeated such that the user can evaluate the effects of various wellness plans, and then decide upon their preferred plan. This allows a user to evaluate the benefits of varying combinations of planner options [Column 17, lines 15-24]. Figures 18-29 of Summerell et al. provide examples of the wellness planner. The user can select from a list of recommendations **(indicating controls)** to reduce physiological age, which is displayed as "Maximum Age Reduction (years)" **(indicating the effectiveness of the control)**. The recommendations comprise a plurality of corrective and preventative measures.

Summerell et al. is directed towards helping users consider and quantify their relative wellness (based on a series of wellness factors) and further evaluate the potential effect on the user's physiological age and wellness implementing a plurality of options/recommendations. Similarly, Mulholland is directed towards considering and quantifying risk, and enabling a sensitivity analysis by varying one uncertain element at a time and examining the effect of the change in that element on the total risk value. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Mulholland to include the steps of user-interactive

risk assessment and evaluation, as disclosed by Summerell et al., because the resulting combination would enable an interactive sensitivity analysis means for evaluating the consequences of voluntary actions on overall risk, a tool that provides the user with a means of measuring progress towards reducing risk.

As per claim 6, Mulholland does not explicitly teach the system of claim 5, wherein in one mode of use, an inherent risk impact cost is aggregated over the inherent cost of each consequence of the risk.

Summerell et al. teaches a composite survival probability **(inherent risk impact cost is aggregated over the inherent cost of each consequence)**, which is the product of all survival probabilities and an adjustment for covariance among the factors, that is calculated and used to adjust the average survival probability rate. The result is a survival probability rate adjusted for the user's level of wellness.

Summerell et al. is directed towards helping users consider and quantify their relative wellness (based on a series of wellness factors) and further evaluate the potential effect on the user's physiological age and wellness implementing a plurality of options/recommendations. Similarly, Mulholland is directed towards considering and quantifying risk, and enabling a sensitivity analysis by varying one uncertain element at a time and examining the effect of the change in that element on the total risk value. Therefore, it would have been obvious to one of ordinary skill in the art at the time of

invention to modify the teachings of Mulholland to include the steps of user-interactive risk assessment and evaluation, as disclosed by Summerell et al., because the resulting combination would enable an interactive sensitivity analysis means for evaluating the consequences of voluntary actions on overall risk, a tool that provides the user with a means of measuring progress towards reducing risk.

As per claim 7, Mulholland does not explicitly teach the system of claim 5, wherein in one mode of use, the residual likelihood is an aggregate calculation based on the effectiveness of each preventative control acting on an inherent likelihood.

Figures 18-29 of Summerell et al. provide examples of the wellness planner. Figures 18 and 19 show examples of physiological age planning windows, without selected plan items. Figures 20 and 21 show examples of physiological age planning windows, with selected plan items. The physiological age is calculated after implementing recommendations **(residual likelihood is an aggregate calculation based on the effectiveness of each preventative control acting on an inherent likelihood)** is displayed.

Summerell et al. is directed towards helping users consider and quantify their relative wellness (based on a series of wellness factors) and further evaluate the potential effect on the user's physiological age and wellness implementing a plurality of options/recommendations. Similarly, Mulholland is directed towards considering and

quantifying risk, and enabling a sensitivity analysis by varying one uncertain element at a time and examining the effect of the change in that element on the total risk value. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Mulholland to include the steps of user-interactive risk assessment and evaluation, as disclosed by Summerell et al., because the resulting combination would enable an interactive sensitivity analysis means for evaluating the consequences of voluntary actions on overall risk, a tool that provides the user with a means of measuring progress towards reducing risk.

As per claim 8, Mulholland does not explicitly teach the system of claim 5, wherein in one mode of use, a residual risk impact cost is aggregated over the residual cost of each consequence of the risk.

Figures 18-29 of Summerell et al. provide examples of the wellness planner. Figures 18 and 19 show examples of physiological age planning windows, without selected plan items. Figures 20 and 21 show examples of physiological age planning windows, with selected plan items. The physiological age is calculated after implementing recommendations **(residual likelihood is an aggregate calculation based on the effectiveness of each preventative control acting on an inherent likelihood)** is displayed.

Summerell et al. is directed towards helping users consider and quantify their relative wellness (based on a series of wellness factors) and further evaluate the

potential effect on the user's physiological age and wellness implementing a plurality of options/recommendations. Similarly, Mulholland is directed towards considering and quantifying risk, and enabling a sensitivity analysis by varying one uncertain element at a time and examining the effect of the change in that element on the total risk value. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Mulholland to include the steps of user-interactive risk assessment and evaluation, as disclosed by Summerell et al., because the resulting combination would enable an interactive sensitivity analysis means for evaluating the consequences of voluntary actions on overall risk, a tool that provides the user with a means of measuring progress towards reducing risk.

Claims 11-20 recite limitations already addressed by the rejection of claims 1-10, made above; therefore, the same rejections apply.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The December 1, 2000 issue of Construction Contractor discloses that CorProfit Systems' KnowRisk software facilitates risk management by permitting detailed, high-quality risk management plans to be completed.

In the August 2002 issue of Australian CPA, David Neiger discussed KnowRisk Standard 2.4.

A December issue of Qantas' in-flight magazine featured an interview with Ian Abrahams of CorProfit Systems (who is listed as one of the inventors of the claimed invention), which "developed a computer software designed to help companies identify and deal with risks. Launched in 1997, Corprofit's software, KnowRisk, is now used Australia-wide and around the world".

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Choi whose telephone number is (571) 272 6971. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Peter Choi
Examiner
Art Unit 3623

PC

April 6, 2006

TARIQ R. HAFIZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600

37 CFR § 1.105 - Requirement for Information

Request for Additional Information

Applicant and the assignee of this application are required under 37 CFR 1.105 to provide the following information that the examiner has determined is reasonably necessary to the examination of this application.

The December 1, 2000 issue of Construction Contractor discloses that CorProfit Systems' KnowRisk software facilitates risk management by permitting detailed, high-quality risk management plans to be completed.

In the August 2002 issue of Australian CPA, David Neiger discussed KnowRisk Standard 2.4.

A December issue of Qantas' in-flight magazine featured an interview with Ian Abrahams of CorProfit Systems (who is listed as one of the inventors of the claimed invention), disclosing that CorProfit Systems "developed a computer software designed to help companies identify and deal with risks. Launched in 1997, Corprofit's software, KnowRisk, is now used Australia-wide and around the world".

It has been established that KnowRisk was launched in 1997, and that KnowRisk Standard 2.4 was available at least since August 2002.

Information regarding KnowRisk Standard 1.0 is requested; specifically, information detailing features of the software, along with availability information.

Information regarding the 1997 launch of KnowRisk is requested; specifically, information detailing features of the software from the 1997 launch.

Information regarding all editions of KnowRisk available during the time period comprising the launch date in 1997 up until January 31, 2001 (the filing date of the application) is requested. Information detailing features or methodologies and version histories of all such editions of KnowRisk is requested.

It appears that the KnowRisk software is directed towards similar subject matter as that of the claimed invention. However, the extent of overlap is unknown. It is unclear whether the claimed invention is an evolution of the KnowRisk software, or simply is directed towards similar subject matter, but emphasizes different levels of analysis.

This information is required to complete the background description in the disclosure by documenting the level of overlap between the claimed invention and the KnowRisk system.

This information is required to complete the background description in the disclosure by documenting the features of the KnowRisk system that was launched in 1997.

The information is required to identify products and services embodying the disclosed subject matter of risk management and identify the properties of similar products and services found in the prior art.

In response to this requirement, please provide the citation and a copy of each publication that any of the applications relied upon to develop the disclosed subject matter that describes the applicant's invention, particularly as to developing KnowRisk. For each publication, please provide a concise explanation of the reliance placed on that publication in the development of the disclosed subject matter.

In response to this requirement, please provide the citation and a copy of each publication which any of the applicants authored or co-authored and which describe the disclosed subject matter of risk management, especially those disclosing the KnowRisk system.

In response to this requirement, please state the specific improvements of the claimed subject matter in claims 1-20 over prior art (KnowRisk) and indicate the specific

elements in the claimed invention that provide those improvements. For claims expressed as means or steps plus function, please provide the specific page and line numbers within the disclosure that describe the claimed structure and acts.

The applicant is reminded that the reply to this requirement must be made with candor and good faith under 37 CFR 1.56. Where the applicant does not have or cannot readily obtain an item of required information, a statement that the item is unknown or cannot be readily obtained will be accepted as a complete response to the requirement for that item.

This requirement is an attachment of the enclosed Office action. A complete response to the enclosed Office action must include a complete response to this requirement. The time period for reply to this requirement coincides with the time period for reply to the enclosed Office action, which is 3 months.

TARIQ R. HAFIZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600

April 4, 2006